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ABSTRACT

Oligomeric compounds including oligoribonucleotides and oligoribonucleosides are provided that have subsequences of 2'-pentoribofuranosyl nucleosides that activate dsRNase. 5 The oligoribonucleotides and oligoribonucleosides can include substituent groups for increasing binding affinity to complementary nucleic acid strand as well as substituent groups for increasing nuclease resistance. The oligomeric compounds are useful for diagnostics and other research 10 purposes, for modulating the expression of a protein in organisms, and for the diagnosis, detection and treatment of other conditions susceptible to oligonucleotide therapeutics. Also included in the invention are mammalian ribonucleases, i.e., enzymes that degrade RNA, and 15 substrates for such ribonucleases. Such a ribonuclease is referred to herein as a dsRNase, wherein "ds" indicates the RNase's specificity for certain double-stranded RNA substrates. The artificial substrates for the dsRNases described herein are useful in preparing affinity matrices 20 for purifying mammalian ribonuclease as well as nondegradative RNA-binding proteins.